

Occupational Injuries and Illnesses and Work-related Fatalities

Technical Note

The series covers two separate programs of the Bureau of Labor Statistics—the annual Survey of Occupational Injuries and Illnesses (SOII) and the Census of Fatal Occupational Injuries (CFOI). Data from both programs are used by employers, workers, and safety and health specialists in efforts to prevent job-related injuries and illnesses and lessen the severity of those that do occur.

The SOII, in cooperation with State agencies, gathers information from employers on the number of nonfatal work-related injuries and illnesses. Each year the survey provides estimates by industry and by State of the number and incidence of workplace injuries and illnesses, and the number of injuries and illnesses that involve lost work time. The median number of days away from work and the percent distribution of days away from work by industry are also given.

For workers with injuries and illnesses involving time away from work, the survey estimates the number and percent distribution by occupation, sex, age, race, Hispanic origin, and length of service. Numbers, percent distributions, and incidence rates also are calculated by detailed nature of injury and illness, part of body affected, source of the injury or illness, and type of event or exposure leading to the incident. Cross tabulations of the worker characteristics and injury/illness circumstances also are available. The median and percent distribution of days away from work are estimated for each worker and case characteristic.

Additional information can be obtained from the annual bulletin, *Occupational Injuries and Illnesses: Counts, Rates, and Characteristics*.

The CFOI collects a systematic, verifiable count of all

fatal work injuries as well as detailed information on how these events occurred. Because studies have shown that no single source captures all worker deaths, multiple data sources are used to identify, verify, and profile fatal work injuries. Death certificates; State and Federal workers' compensation reports; Occupational Safety and Health Administration (OSHA) fatality reports; news media, coroner, medical examiner, and autopsy reports; State motor vehicle fatality reports; and follow-up questionnaires are among the major sources used to compile the Federal Government's most complete count of job-related fatalities.

Information such as type of incident and machinery or equipment involved; nature of injury and part of body affected; occupation, age, race, and sex of the worker; and industry of the employer is collected for each fatal injury.

Summary tables are released approximately 8 months after the end of the reference year. Profiles of fatalities occurring to specific groups of workers, or for specific types of events, or for those involving certain types of equipment or machinery also are possible.

Additional information

For more detailed information on these programs, contact the Office of Safety, Health, and Working Conditions, Bureau of Labor Statistics, 2 Massachusetts Ave. NE, Room 3180, Washington, DC 20212.

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TABLE E-1. Selected characteristics of workers and cases in 10 selected occupations: Percent distribution of days-away-from-work cases,¹1998

Characteristic	All occupations	Truck drivers	Laborers, except construction	Nursing aides, orderlies and attendants	Janitors and cleaners
Total number of cases	1,730,534	131,785	97,250	84,128	44,189
Percent of total by characteristic—					
Sex:					
Male	66.3	93.4	85.5	10.0	70.2
Female	33.0	6.3	13.8	89.5	29.4
Age:²					
14 - 15	(³)	—	—	—	—
16 - 19	3.5	.7	5.5	2.7	2.9
20 - 24	11.6	5.5	16.7	13.5	7.9
25 - 34	28.2	28.9	29.7	27.4	23.5
35 - 44	28.2	32.9	26.1	27.6	26.7
45 - 54	18.0	20.0	12.0	18.8	22.6
55 - 64	7.6	9.7	4.6	7.9	11.6
65 and over	1.2	1.2	.6	.9	3.2
Length of service with employer:					
Less than 3 months	12.8	8.5	17.4	12.8	12.7
3 - 11 months	18.3	18.2	21.7	19.5	20.8
1 - 5 years	31.6	32.8	28.6	34.3	34.2
More than 5 years	25.7	27.0	19.1	21.6	24.2
Not reported	11.6	13.5	13.1	11.8	8.2
Race or ethnic origin:					
White, non-Hispanic	51.0	55.3	47.3	48.6	42.3
Black, non-Hispanic	9.1	9.3	10.3	18.5	16.9
Hispanic	10.4	7.8	12.9	4.8	13.6
Asian or Pacific Islander	1.5	1.0	1.3	1.5	1.4
American Indian or Alaskan Native .....	.4	.3	.7	.3	.3
Not reported	27.6	26.2	27.6	26.3	25.5
Major industry division:					
Agriculture, forestry, and fishing ⁴	2.4	1.2	.8	—	.7
Mining ⁵ .....	.8	.6	1.6	—	—
Construction	10.3	3.5	—	—	1.8
Manufacturing	24.8	9.3	33.8	—	15.3
Transportation and public utilities ⁵	11.6	51.2	6.2	—	2.8
Wholesale trade	7.8	17.7	27.2	—	3.4
Retail trade	17.0	9.9	18.5	—	13.9
Finance, insurance, and real estate	2.1	.3	1.3	.3	11.9
Services	23.2	6.4	10.6	99.6	50.2
Number of days away from work:					
1	16.7	11.0	16.7	16.8	19.9
2	13.4	9.6	13.2	15.2	11.8
3 - 5	20.2	19.4	20.1	22.4	19.9
6 - 10	12.9	12.9	13.7	14.0	13.2
11 - 20	11.2	13.5	11.0	11.0	8.6
21 - 30	6.4	7.7	6.5	5.8	6.3
31 or more	19.1	25.9	18.9	14.9	20.2
Median days away from work	5	10	6	5	5

See footnotes at end of table.

Occupational Injuries and Illnesses and Work-related Fatalities

TABLE E-1. Selected characteristics of workers and cases in 10 selected occupations: Percent distribution of days-away-from-work cases,¹1998 — Continued

Characteristic	Construction laborers	Assemblers	Carpenters	Cooks	Welders and cutters	Stock handlers and baggers
Total number of cases	44,057	43,262	33,002	28,549	28,363	26,274
Percent of total by characteristic—						
Sex:						
Male	96.2	59.3	98.0	55.8	93.9	64.0
Female	3.4	40.0	1.4	43.9	5.9	35.7
Age:²						
14 - 15	—	—	—	—	—	.1
16 - 19	6.1	1.9	2.1	11.3	2.7	13.0
20 - 24	16.6	11.1	10.7	15.3	13.4	18.4
25 - 34	34.7	29.4	30.4	24.5	31.6	24.2
35 - 44	26.1	31.2	30.2	24.2	29.9	23.0
45 - 54	10.7	17.6	19.0	16.4	14.3	12.7
55 - 64	3.6	6.5	5.3	6.9	5.5	4.9
65 and over .....	.3	.7	.3	.8	2.0	2.4
Length of service with employer:						
Less than 3 months	27.2	14.3	19.8	20.9	13.0	17.7
3 - 11 months	24.9	15.8	20.3	20.8	21.7	20.5
1 - 5 years	29.2	32.9	33.1	30.8	33.5	28.6
More than 5 years	9.8	24.7	19.4	19.5	24.8	14.5
Not reported	8.8	12.2	7.4	8.1	7.0	18.7
Race or ethnic origin:						
White, non-Hispanic	50.7	47.4	69.9	44.8	58.2	46.0
Black, non-Hispanic	8.6	7.7	2.7	17.0	6.0	6.9
Hispanic	20.2	9.4	8.2	11.2	10.6	8.4
Asian or Pacific Islander .....	.8	1.8	.8	3.7	1.2	.7
American Indian or Alaskan Native .....	.8	.3	.3	.2	.5	.3
Not reported	18.9	33.4	18.1	23.1	23.6	37.6
Major industry division:						
Agriculture, forestry, and fishing ⁴ .....	.1	—	—	—	.3	—
Mining ⁵	—	—	.2	—	1.1	.1
Construction	97.6	1.0	78.9	—	5.2	—
Manufacturing .....	.2	87.2	7.9	.5	76.3	6.5
Transportation and public utilities ⁵ .....	.5	.2	.5	.3	1.7	1.0
Wholesale trade	—	6.1	2.7	.3	7.0	10.9
Retail trade .....	.4	1.7	3.3	72.0	2.0	80.3
Finance, insurance, and real estate .....	.3	—	1.4	.6	—	.1
Services .....	.8	3.7	5.0	26.3	6.3	.9
Number of days away from work:						
1	14.5	18.0	15.4	15.4	28.2	18.7
2	12.7	12.7	11.4	13.6	16.3	14.9
3 - 5	19.2	17.3	20.2	20.8	16.5	22.7
6 - 10	11.8	11.9	16.4	17.2	11.4	11.0
11 - 20	14.1	13.7	11.0	12.2	8.4	11.9
21 - 30	6.7	6.9	7.3	5.6	5.1	4.5
31 or more	21.1	19.5	18.4	15.2	14.2	16.2
Median days away from work	7	6	6	6	3	5

See footnotes at end of table.

TABLE E-1. Selected characteristics of workers and cases in 10 selected occupations: Percent distribution of days-away-from-work cases,¹1998 — Continued

Characteristic	All occupations	Truck drivers	Laborers, except construction	Nursing aides, orderlies and attendants	Janitors and cleaners
Percent of total by characteristic—					
Nature of injury, illness:					
Sprains, strains, tears	43.9	53.8	45.2	65.5	45.3
Fractures	6.7	7.6	6.9	2.5	7.9
Cuts, lacerations	9.3	4.4	8.8	1.0	7.4
Amputations .....	.6	.2	.5	—	.2
Bruises, contusions	8.8	8.7	10.9	7.2	10.2
Heat burns, scalds	1.6	.2	1.2	.1	.8
Chemical burns .....	.7	.5	.7	.2	1.6
Carpal tunnel syndrome	1.5	.3	.9	.3	.6
Tendonitis	1.0	.4	.8	.6	.3
Multiple traumatic injuries and disorders	3.3	4.6	3.2	2.1	3.2
With fractures and burns .....	.6	.7	.8	.1	.3
With sprains and bruises	1.2	1.6	1.0	1.0	1.3
Soreness, pain, including back	5.9	6.3	5.8	8.9	6.5
Back pain only	2.4	2.7	2.7	4.1	2.9
All other natures	16.7	13.0	15.0	11.4	15.9
Part of body affected:					
Head	6.8	4.7	6.6	3.5	7.6
Eye(s)	3.4	1.6	3.3	.8	3.1
Neck, including throat	1.7	2.6	1.2	1.7	1.1
Trunk	37.3	42.6	39.5	57.3	42.7
Shoulder, including clavicle, scapula	5.2	6.1	5.5	7.4	5.7
Back, including spine, spinal cord	25.4	28.6	26.8	43.6	29.1
Upper extremities	23.2	13.2	21.8	12.5	15.6
Wrist(s)	4.9	2.2	3.9	3.9	3.2
Hand(s), except finger(s)	4.3	2.3	4.4	1.7	2.9
Finger(s), fingernail(s)	8.5	3.8	8.3	2.5	4.9
Lower extremities	20.5	24.2	22.9	12.9	21.6
Knee(s)	7.1	8.1	5.3	5.5	6.9
Foot, toe	4.9	4.1	7.6	1.8	6.7
Body systems	1.3	.4	.7	1.1	2.5
Multiple body parts	8.2	11.5	6.8	10.5	8.0
All other parts of body	1.0	.8	.6	.5	.9
Source of injury, illness:					
Chemicals and chemical products	1.7	.7	1.4	.9	3.8
Containers	14.6	19.8	23.2	1.3	15.6
Furniture and fixtures	3.6	2.3	4.4	3.1	9.5
Machinery	6.8	3.3	7.3	.6	6.8
Parts and materials	11.5	9.3	15.5	1.0	4.8
Bodily motion or position of injured,					
ill worker	15.2	15.1	12.1	9.6	12.4
Floors, walkways, ground surfaces	15.5	17.0	11.4	11.5	21.3
Tools, instruments, and equipment	4.7	1.1	4.5	.2	5.6
Vehicles	7.9	23.0	8.0	2.8	5.0
Health care patient	4.6	.2	—	59.2	.1
All other sources	14.0	8.1	12.2	9.8	15.3

See footnotes at end of table.

Occupational Injuries and Illnesses and Work-related Fatalities

TABLE E-1. Selected characteristics of workers and cases in 10 selected occupations: Percent distribution of days-away-from-work cases,¹1998 — Continued

Characteristic	Construction laborers	Assemblers	Carpenters	Cooks	Welders and cutters	Stock handlers and baggers
Percent of total by characteristic—						
Nature of injury, illness:						
Sprains, strains, tears	38.2	39.3	33.9	26.4	30.6	48.8
Fractures	11.2	4.6	9.5	4.9	6.5	4.7
Cuts, lacerations	14.5	12.0	23.6	21.3	10.6	10.1
Amputations .....	.6	.9	1.0	1.0	.4	.2
Bruises, contusions	8.6	7.6	6.2	6.1	7.5	12.4
Heat burns, scalds	1.1	.5	.2	21.4	3.5	.5
Chemical burns .....	.7	.5	.2	.2	.4	.3
Carpal tunnel syndrome .....	.5	5.2	.8	1.3	1.6	.9
Tendonitis .....	.4	4.0	1.9	.2	.6	.7
Multiple traumatic injuries and disorders	3.3	2.1	2.2	4.2	2.2	2.0
With fractures and burns	1.3	.5	1.0	—	.7	—
With sprains and bruises .....	.7	.6	.6	3.0	.4	1.0
Soreness, pain, including back	4.5	4.4	4.1	4.5	3.8	5.6
Back pain only	2.3	1.4	2.0	1.5	1.4	2.0
All other natures	16.4	18.9	16.2	8.5	32.3	14.0
Part of body affected:						
Head	8.1	6.2	8.1	2.9	21.1	5.9
Eye(s)	4.6	3.5	4.7	.5	19.2	1.3
Neck, including throat	1.1	1.6	1.0	.3	1.3	1.6
Trunk	30.8	33.7	30.3	24.2	27.7	44.3
Shoulder, including clavicle, scapula	3.7	6.0	4.1	3.4	3.8	5.0
Back, including spine, spinal cord	21.2	21.0	19.9	14.2	17.4	30.8
Upper extremities	22.1	36.6	29.3	46.1	23.1	22.0
Wrist(s)	2.6	11.9	4.5	5.7	4.8	4.5
Hand(s), except finger(s)	4.2	5.0	5.4	10.1	4.3	4.0
Finger(s), fingernail(s)	9.6	12.5	13.8	21.9	9.6	8.0
Lower extremities	27.0	13.3	24.2	17.4	20.1	20.3
Knee(s)	7.3	5.0	8.7	3.9	6.0	7.1
Foot, toe	8.6	3.4	7.2	3.8	6.3	5.8
Body systems	1.1	1.3	.4	.5	.7	.5
Multiple body parts	9.3	6.0	5.5	7.1	3.0	5.1
All other parts of body .....	.5	1.2	1.2	1.5	3.0	.3
Source of injury, illness:						
Chemicals and chemical products	1.2	1.5	.4	.6	1.1	.7
Containers	5.7	9.5	3.0	15.1	4.0	38.8
Furniture and fixtures .....	.6	3.4	3.3	1.6	1.5	5.0
Machinery	5.2	7.8	4.5	9.6	8.2	6.0
Parts and materials	26.7	20.1	29.0	1.1	30.6	3.8
Bodily motion or position of injured,						
ill worker	10.8	27.9	11.9	10.3	12.3	11.2
Floors, walkways, ground surfaces	14.6	7.7	17.7	19.9	7.3	11.6
Tools, instruments, and equipment	11.0	7.3	10.4	16.4	13.6	5.6
Vehicles	6.9	3.1	2.3	1.8	1.5	8.2
Health care patient	—	—	—	.1	—	—
All other sources	17.2	11.6	17.4	23.4	19.8	9.0

See footnotes at end of table.

TABLE E-1. Selected characteristics of workers and cases in 10 selected occupations: Percent distribution of days-away-from-work cases,¹1998 — Continued

Characteristic	All occupa-tions	Truck drivers	Laborers, except construction	Nursing aides, orderlies and attendants	Janitors and cleaners
Percent of total by characteristic—					
Event or exposure:					
Contact with objects and equipment	27.6	19.4	32.6	8.9	26.1
Struck by object	13.3	9.5	17.1	3.9	12.4
Struck against object	7.3	6.1	7.1	3.4	7.5
Caught in or compressed by equipment or objects	4.5	2.2	6.3	1.1	4.2
Fall to lower level	5.5	9.0	4.0	1.5	9.3
Fall to same level	10.7	9.0	8.4	10.5	12.0
Slip, trip, loss of balance—without fall	3.2	3.9	2.8	2.1	4.1
Overexertion	27.6	29.7	32.6	56.2	27.1
Overexertion in lifting	16.2	16.4	20.7	31.1	15.9
Repetitive motion	3.8	.9	2.6	.8	1.4
Exposure to harmful substances or environments	4.7	1.5	3.4	2.7	7.4
Transportation incidents	4.0	12.5	3.9	1.7	2.3
Fires and explosions .....	.2	.1	.3	.1	—
Assaults and violent acts	1.3	.4	.2	6.7	.4
By person(s)	1.0	.2	.1	6.5	.3
By other than person .....	.3	.2	.2	.1	.2
All other events	11.4	13.7	9.2	8.9	9.8

See footnotes at end of table.

TABLE E-1. Selected characteristics of workers and cases in 10 selected occupations: Percent distribution of days-away-from-work cases,¹1998 — Continued

Characteristic	Construction laborers	Assemblers	Carpenters	Cooks	Welders and cutters	Stock handlers and baggers
Percent of total by characteristic—						
Event or exposure:						
Contact with objects and equipment	40.0	30.3	41.8	34.0	41.6	30.4
Struck by object	21.7	14.3	24.2	21.2	20.4	19.3
Struck against object	9.9	7.9	9.6	9.7	9.3	6.5
Caught in or compressed by equipment or objects	5.1	5.7	3.5	2.1	5.0	3.6
Fall to lower level	7.9	2.2	13.8	1.2	2.9	4.5
Fall to same level	7.1	6.0	5.3	19.0	3.7	8.7
Slip, trip, loss of balance—without fall	2.5	2.7	2.3	4.4	2.4	2.3
Overexertion	21.4	26.3	22.2	10.3	20.4	39.0
Overexertion in lifting	12.3	14.0	13.7	7.5	10.4	25.6
Repetitive motion	1.1	15.9	2.4	1.6	3.4	2.7
Exposure to harmful substances or environments	4.2	3.4	1.0	22.4	13.3	1.9
Transportation incidents	4.9	.6	1.1	—	.5	2.2
Fires and explosions .....	.2	.2	—	—	.7	—
Assaults and violent acts .....	.3	.1	.1	.3	—	.2
By person(s) .....	.1	—	—	.2	—	.2
By other than person .....	.2	—	—	—	—	—
All other events	10.5	12.4	9.8	6.7	11.1	8.1

¹ Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

² Information is not shown separately for injured workers under age 14; they accounted for fewer than 50 cases.

³ Less than 0.1 percent.

⁴ Excludes farms with fewer than 11 employees.

⁵ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are

provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor, and by the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

NOTE: Dashes indicate data that are not available. Because of rounding and nonclassifiable responses, data may not sum to the totals.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Total	6,217	6,331	6,632	6,275	6,202	6,238	6,055	6,023
Employee status								
Wage and salary workers ¹	4,975	5,025	5,370	5,074	4,977	4,970	4,804	4,884
Self-employed ²	1,242	1,303	1,262	1,201	1,225	1,268	1,251	1,139
Sex								
Men	5,774	5,842	6,104	5,736	5,688	5,761	5,569	5,582
Women	443	489	528	539	514	477	486	441
Age								
Under 15 years	18	19	18	16	23	15	25	15
15 to 17 years	50	49	49	52	47	47	40	57
18 to 24 years	651	610	659	616	569	616	558	572
25 to 44 years	3,094	3,105	3,186	2,980	2,948	2,849	2,763	2,670
45 to 64 years	1,934	2,015	2,176	2,083	2,097	2,177	2,115	2,140
65 to 74 years	340	380	380	372	341	381	369	397
75 years and over	127	142	145	143	163	139	172	162
Race								
White	5,173	5,175	5,460	5,120	5,111	5,108	5,041	4,990
Black	624	666	707	697	631	677	594	626
Other or unknown	420	490	465	458	460	453	420	407
Hispanic origin								
Hispanic ³	533	634	624	619	638	658	707	725
Event or exposure								
Transportation incidents								
Highway	2,484	2,499	2,762	2,587	2,601	2,605	2,645	2,613
Collision between vehicles, mobile equipment	1,158	1,242	1,343	1,346	1,346	1,393	1,442	1,491
Re-entrant collision	578	659	654	642	667	640	707	711
Moving in same direction	13	13	9	9	19	8	14	29
Moving in opposite directions, oncoming	78	100	120	127	96	103	120	129
Moving in intersection	201	245	230	246	220	230	272	269
Moving and standing vehicle, mobile equipment-in roadway	107	123	144	99	153	142	143	160
Moving and standing vehicle, mobile equipment-side of road	28	31	21	31	35	24	39	39
Vehicle struck stationary object or equipment in roadway	18	22	19	14	16	21	14	19
Vehicle struck stationary object or equipment on side of road	28	30	27	19	29	22	18	33
Noncollision	164	159	228	256	214	260	289	301
Jack-knifed or overturned-no collision	301	336	373	352	352	387	375	388
Ran off highway--no collision	213	236	274	261	266	298	302	321
Struck by shifting load	64	57	58	57	43	49	32	41
Sudden start or stop, n.e.c.	—	—	—	—	—	—	9	—
Nonhighway (farm, industrial premises)	436	392	409	387	374	377	388	353
Collision between vehicles or mobile equipment	16	13	17	—	11	15	9	13
Vehicle, mobile equipment struck stationary object	19	22	27	23	37	24	30	29
Noncollision accident	389	342	353	355	316	328	332	306
Fall from moving vehicle, mobile equipment	26	17	23	36	20	17	19	22
Fell from and struck by vehicle, mobile equipment	94	87	71	71	59	71	70	58
Overturned	208	214	226	209	206	216	217	206

See footnotes at end of table.

Occupational Injuries and Illnesses and Work-related Fatalities

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Event or exposure – continued								
Loss of control	24	—	8	6	6	—	—	—
Struck by shifting load	—	—	—	—	5	5	—	5
Sudden start or stop, n.e.c.	—	—	—	5	—	—	—	—
Aircraft	353	282	426	283	324	261	224	227
Worker struck by vehicle, mobile equipment	346	365	391	388	353	367	413	377
Worker struck by vehicle, mobile equipment in roadway	109	127	137	123	125	129	131	137
Worker struck by vehicle, mobile equipment on side of road	59	56	66	60	51	56	66	65
Worker struck by vehicle, mobile equipment in parking lot or non-road area	144	151	151	175	162	160	199	165
Water vehicle	109	119	94	87	119	109	112	102
Collision	—	—	—	—	—	8	9	5
Explosion, fire, n.e.c.	—	—	6	—	9	—	—	—
Fall from ship or boat, n.e.c.	40	43	39	32	43	37	49	32
Fall on ship, boat	—	—	7	6	7	7	6	8
Sinking, capsized water vehicle	54	54	32	29	40	37	37	42
Railway	66	86	81	82	74	93	60	56
Collision between railway vehicles	—	7	12	10	10	7	—	8
Collision between railway vehicle and other vehicle	47	64	62	60	52	72	48	42
Fell from and struck by railway vehicle	5	—	—	—	—	6	5	—
Derailment	—	6	—	—	—	—	—	—
Assaults and violent acts	1,281	1,329	1,321	1,280	1,165	1,111	962	893
Homicides	1,044	1,074	1,080	1,036	927	860	714	645
Hitting, kicking, beating	52	35	47	46	50	48	48	48
Shooting	852	884	934	762	761	708	574	506
Stabbing	90	95	60	67	80	73	61	60
Assaults and violent acts by person(s), n.e.c.	30	48	31	153	29	26	24	25
Self-inflicted injury	205	222	214	221	204	216	221	208
Assaults by animals	29	32	27	20	32	33	24	39
Contact with objects and equipment	1,004	1,045	1,017	916	1,010	1,035	944	1,029
Struck by object	557	565	590	547	582	579	520	585
Struck by falling object	361	346	372	341	403	384	319	358
Struck by flying object	77	81	68	63	58	54	59	55
Struck by discharged object or substance	27	32	21	23	24	22	19	19
Struck by swinging or slipping object	42	33	31	44	36	43	30	39
Struck by rolling, sliding objects on floor or ground level	38	63	60	60	55	68	75	97
Caught in or compressed by equipment or objects	316	311	280	255	285	320	266	302
Caught in running equipment or machinery	159	151	147	131	146	189	129	163
Compressed or pinched by rolling, sliding, or shifting objects	55	57	56	56	66	55	62	51
Caught in or crushed in collapsing materials	110	138	132	99	131	118	140	128
Excavation or trenching cave-in	42	38	49	33	55	35	46	44
Other cave-in	5	23	12	5	13	9	15	18
Landslide	5	—	—	—	—	—	—	—
Caught in or crushed in collapsing structure	31	27	31	32	35	38	42	28
Falls	600	618	665	651	691	716	706	717
Fall to lower level	507	534	580	578	610	653	625	634
Fall down stairs or steps	13	14	19	16	15	13	12	23
Fall from floor, dock, or ground level	37	38	27	33	27	40	32	43
Fall through existing floor opening	11	24	14	16	13	20	21	19
Fall through floor surface	—	—	—	—	—	—	—	7
Fall from loading dock	—	5	—	—	—	6	—	—
Fall from ground level to lower level	10	—	5	7	—	—	—	7
Fall from ladder	78	76	86	97	97	116	111	96
Fall from piled or stacked material	—	7	5	—	—	5	—	—
Fall from roof	108	120	129	143	149	154	157	153
Fall through existing roof opening	8	6	11	18	15	20	12	14
Fall through roof surface	12	14	18	19	21	17	20	16
Fall through skylight	10	19	14	18	16	17	22	18

See footnotes at end of table.

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Event or exposure – continued								
Fall from roof edge	44	38	41	36	46	56	47	70
Fall from scaffold, staging	66	71	89	82	88	87	98	92
Fall from building girders or other structural steel	37	40	34	34	38	48	44	49
Fall from nonmoving vehicle	39	33	48	34	55	53	48	47
Fall to lower level, n.e.c.	95	112	119	117	117	121	107	116
Jump to lower level	8	8	7	—	13	—	—	—
Jump from structure, or structural element	—	—	—	—	5	—	—	—
Fall on same level	62	49	63	53	52	44	51	66
Fall to floor, walkway, or other surface	43	35	46	33	40	33	34	51
Fall onto or against objects	14	9	14	13	7	9	8	9
Exposure to harmful substances or environments								
Contact with electric current	605	592	641	609	533	554	576	529
Contact with electric current of machine, tool, appliance, light fixture	334	325	348	348	281	298	334	278
Contact with wiring, transformers, or other electrical component	60	44	63	55	46	41	51	51
Contact with overhead power lines	66	100	98	94	70	71	84	75
Contact with underground, buried power lines	140	115	132	139	116	138	153	124
Contact with undergound, buried power lines	—	5	6	5	5	5	9	—
Struck by lightning	15	16	15	17	18	22	21	13
Contact with temperature extremes	33	38	50	56	33	40	48	50
Exposure to environmental heat	12	22	28	35	18	22	34	34
Exposure to environmental cold	5	—	7	8	—	—	—	—
Contact with hot objects or substances	16	11	15	13	13	17	11	15
Exposure to caustic, noxious, or allergenic substances	127	116	133	107	123	123	105	106
Inhalation of substance	83	68	84	62	76	59	48	55
Inhalation in enclosed, restricted, or confined space ⁴	51	43	44	35	56	25	27	23
Inhalation in open or nonconfined space	18	15	24	21	12	19	14	23
Contact with skin or other exposed tissue	5	—	—	—	5	—	—	—
Injections, stings, venomous bites	10	10	11	9	14	23	12	15
Needle sticks	—	—	—	—	—	7	—	6
Bee, wasp, hornet sting	—	5	8	—	5	10	6	5
Ingestion of substance	13	13	12	18	20	26	20	20
Oxygen deficiency	111	112	109	97	95	90	87	93
Drowning, submersion	78	90	89	77	70	72	75	75
Depletion of oxygen in other enclosed, restricted, or confined space ⁴	13	—	—	10	12	5	7	—
Fires and explosions								
Fires--unintended or uncontrolled	167	204	202	207	185	196	206	216
Fires, unspecified	59	91	106	97	98	87	117	115
Fire in residence, building, or other structure	—	9	6	—	5	5	—	—
Forest, brush, or other outdoor fire	31	53	52	57	64	39	69	74
Ignition of clothing from controlled heat source	5	—	20	9	10	8	14	6
Explosion	—	—	—	—	—	7	—	6
Explosion	105	111	96	107	85	109	89	99
Explosion, unspecified	18	8	5	7	—	6	—	5
Explosion of pressure vessel or piping	36	39	32	42	45	37	39	38
Other events or exposures ⁵	76	44	24	25	17	21	16	26
Worker activity								
Vehicular and transportation operations								
Driving, operating	2,312	2,372	2,660	2,448	2,534	2,504	2,527	2,545
Driving, operating	1,556	1,595	1,650	1,627	1,624	1,703	1,675	1,648
Automobile	448	472	452	457	419	389	371	335
Airplane	170	143	157	159	139	157	130	123
Truck	613	707	738	719	743	842	838	869
Industrial or construction vehicle	97	87	84	98	111	107	115	103
Boat	25	27	26	18	28	24	25	27
Train	—	8	7	8	9	7	—	7

See footnotes at end of table.

Occupational Injuries and Illnesses and Work-related Fatalities

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Worker activity – continued								
Bus	5	8	6	10	6	8	9	18
Bicycle, motorcycle	26	17	29	21	19	24	14	21
Riding in, on	370	408	535	391	463	389	372	450
Automobile	44	48	50	40	33	45	39	43
Airplane	137	108	242	117	176	99	76	101
Truck	68	93	118	115	101	88	113	127
Industrial/construction vehicle	17	11	20	15	11	17	10	13
Boat	42	81	55	54	92	92	88	78
Train	—	9	12	12	10	6	—	9
Horse	—	8	12	9	11	9	12	17
Boarding, alighting	33	38	67	48	48	46	33	50
Resurfacing, blacktopping, etc.	7	13	5	—	10	8	10	10
Directing, flagging traffic	29	36	33	34	21	32	45	48
Walking in or near roadway, etc., n.e.c.	82	77	88	89	104	94	116	118
Vehicular and transportation operations, n.e.c.	206	185	272	239	237	220	252	206
Driving, operating farm vehicle	150	145	209	184	196	170	196	181
Riding in, on farm vehicle	10	11	11	24	11	14	14	16
Boarding, alighting farm vehicle	5	—	10	—	5	9	6	5
Using or operating tools, machinery	585	698	637	572	594	653	542	553
Operating heavy equipment	220	307	252	213	198	226	198	171
Hydraulic equipment	—	7	—	10	14	13	10	15
Crane	31	12	20	20	17	24	26	18
Farm machinery	99	170	101	68	55	76	61	37
Mine machinery	17	26	10	18	27	16	21	18
Earth moving machinery	19	24	44	38	29	29	24	42
Materials handling machinery	31	24	30	22	25	24	25	15
Operating machinery	84	82	95	74	69	94	61	86
Using power tools	46	35	41	44	37	47	29	44
Using nonpowered hand tools	15	25	17	20	23	23	29	37
Operating or reading gauges, valves, switches	16	21	23	21	19	23	21	24
Welding	33	36	39	37	45	51	59	54
Logging, trimming, pruning	148	164	147	133	187	178	134	128
Using or operating tools, machinery, gauges, n.e.c.	8	17	16	14	6	7	5	—
Constructing, repairing, cleaning	978	1,075	1,177	1,182	1,145	1,215	1,225	1,252
Construction, assembling, dismantling	353	365	477	468	450	451	505	509
Constructing, assembling	80	95	116	141	113	100	120	151
Installing	104	108	171	132	150	165	193	200
Dismantling, removing	70	71	81	72	70	86	91	66
Repair, maintenance	347	422	405	426	411	476	439	428
Repairing	173	214	212	208	221	241	221	230
Maintenance	42	71	55	54	59	88	80	72
Adjusting	12	12	8	16	8	14	19	9
Unjamming	20	16	23	24	23	29	30	31
Inspecting or checking	57	67	71	57	58	54	66	92
Cleaning, washing	101	86	109	88	78	99	91	104
Clearing, spraying	22	20	13	17	13	15	17	12
Painting, etc.	30	47	44	46	46	52	43	47
Constructing, repairing, cleaning, n.e.c.	16	12	18	13	13	14	8	12
Protective service activities	156	176	217	207	171	184	164	160
Fighting a fire	20	19	47	22	22	27	21	35
Tending to a hazardous materials incident	—	—	—	5	—	—	—	—
Apprehending, breaking up fight, chasing	26	34	29	43	33	45	35	37
Rescuing or evacuating	6	7	9	18	15	17	8	11
Materials handling operations	235	255	247	264	249	283	280	303
Lifting materials	13	13	12	8	7	12	10	6
Carrying materials	16	16	17	11	6	12	22	11

See footnotes at end of table.

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Worker activity – continued								
Holding materials	9	8	—	7	5	8	12	17
Loading, unloading (packing, unpacking) materials	92	108	116	129	101	108	99	122
Working with chemicals (except cleaning)	20	14	24	18	21	24	22	34
Retrieving objects	8	17	13	9	13	15	18	14
Materials handling, n.e.c.	53	62	43	57	69	67	70	59
Physical activity⁵, n.e.c.	308	364	364	297	346	407	430	407
All other activities	1,637	1,390	1,316	1,303	1,162	992	885	785
Tending a retail establishment	399	489	539	415	454	417	323	294
Office work	49	51	73	76	76	89	80	72
Health care and social services activities	14	26	29	19	27	17	30	26
Animal care and tending	28	33	28	27	38	38	32	43
Legal service activities	9	5	6	7	5	8	—	—
Teaching	6	7	—	—	9	—	7	7
Activity, n.e.c.	1,118	772	636	751	534	405	399	336
Occupation								
Managerial and professional specialty	713	696	776	711	724	668	645	597
Executive, administrative, and managerial	444	435	491	471	445	417	411	371
Chief executives and general administrators, public administration	—	—	5	—	—	—	—	—
Administrators and officials, public administration	22	17	11	24	10	8	10	—
Administrators, protective services	—	—	—	—	7	6	7	—
Financial managers	8	5	14	14	10	8	8	6
Managers, marketing, advertising, and public relations	18	11	30	16	9	11	7	9
Administrators, education and related fields	11	6	6	6	5	8	—	—
Managers, medicine and health	—	—	—	5	5	8	—	—
Managers, food serving and lodging establishments	79	86	75	58	75	89	56	73
Managers, properties and real estate	22	20	20	20	23	20	16	19
Funeral directors	11	—	—	—	—	—	—	—
Managers, service organizations, n.e.c.	11	15	9	11	10	10	10	8
Managers and administrators, n.e.c.	206	215	255	246	228	207	217	196
Management related occupations	46	46	56	61	52	37	63	44
Accountants and auditors	6	13	13	13	13	7	18	11
Other financial officers	6	—	5	10	—	—	10	7
Management analysts	—	—	6	—	—	—	—	—
Personnel, training, and labor relations specialists	—	—	—	—	—	5	—	—
Purchasing agents and buyers, farm products	—	5	—	—	—	—	—	—
Purchasing agents and buyers, n.e.c.	—	—	—	5	—	—	—	6
Construction inspectors	6	5	—	8	8	—	6	—
Inspectors and compliance officers, except construction	9	6	10	10	7	6	10	7
Professional specialty	269	261	285	240	279	251	234	226
Engineers, architects, and surveyors	52	53	70	67	54	45	49	46
Engineers	49	45	64	63	52	40	47	41
Aerospace	5	7	—	—	5	—	—	—
Chemical	—	—	5	—	—	—	—	—
Civil engineers	6	14	6	18	—	5	10	11
Electrical and electronic	11	8	15	6	12	13	9	7
Industrial	—	—	10	6	—	—	—	—
Mechanical	6	—	—	8	6	6	—	7
Marine and naval architects	—	6	—	—	5	—	—	—
Surveyors and mapping scientists	—	6	—	—	—	—	—	—
Mathematical and computer scientists	7	6	15	5	6	10	9	—
Computer systems analysts and scientists	6	—	11	—	5	8	9	—
Natural scientists	25	14	17	10	19	12	10	12

See footnotes at end of table.

Occupational Injuries and Illnesses and Work-related Fatalities

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Occupation – continued								
Geologists and geodesists	7	—	—	—	—	—	—	—
Biological and life scientists	8	—	6	—	6	—	—	5
Health diagnosing occupations	21	21	16	19	19	12	14	12
Physicians	13	13	11	12	14	9	8	11
Dentists	—	5	—	—	—	—	—	—
Veterinarians	—	—	—	5	—	—	—	—
Health assessment and treating occupations	22	32	28	17	27	29	19	35
Registered nurses	14	21	23	12	15	20	16	19
Teachers, postsecondary	—	8	9	6	11	9	12	10
Teachers, except postsecondary	34	29	17	20	24	24	37	29
Teachers, elementary school	6	6	—	—	5	—	5	—
Teachers, secondary school	—	—	—	6	—	6	8	—
Social, recreation, and religious workers	32	33	33	22	41	28	23	18
Social workers	10	11	11	7	19	13	11	8
Clergy	15	12	16	12	13	7	7	—
Lawyers and judges	14	11	18	17	17	12	17	13
Lawyers	13	11	16	17	16	11	17	13
Writers, artists, entertainers, and athletes	51	48	55	50	54	64	40	43
Actors and directors	5	5	—	—	—	—	—	—
Photographers	9	6	6	9	5	14	6	6
Artists, performers, and related workers	7	7	11	6	5	8	8	7
Public relations specialists	—	5	—	—	—	—	—	—
Athletes	10	15	20	14	23	26	14	19
Technical, sales, and administrative support	878	862	965	840	780	760	696	613
Technicians and related support occupations	239	179	223	204	171	191	183	161
Health technologists and technicians	19	17	20	15	20	15	21	17
Clinical laboratory technologists and technicians	5	5	—	—	—	—	—	—
Engineering and related technologists and technicians	35	19	27	32	23	33	30	22
Electrical and electronic technicians	19	9	15	14	11	16	15	11
Technicians, except health, engineering, and science	177	136	162	150	118	133	127	116
Airplane pilots and navigators	156	117	142	124	108	118	106	97
Sales occupations	517	563	595	500	512	462	398	356
Supervisors and proprietors, sales occupations	241	250	252	217	231	226	186	140
Sales representatives, finance and business services	46	45	40	33	51	40	31	39
Real estate sales occupations	9	11	7	12	12	11	6	5
Securities and financial services sales occupations	5	6	—	—	7	—	—	10
Sales representatives, commodities except retail	36	35	45	32	35	13	24	27
Sales representatives, mining, manufacturing, and wholesale ..	34	33	44	29	33	13	24	27
Sales workers, retail and personal services	191	228	256	215	195	183	153	144
Sales workers, motor vehicles and boats	12	17	17	11	19	10	20	6
Sales workers, furniture and home furnishings	—	5	—	—	—	—	—	—
Sales workers, parts	—	9	—	—	5	—	—	7
Sales counter clerks	16	25	27	10	14	12	15	12
Cashiers	82	101	111	116	96	84	52	55
Street and door-to-door sales workers	12	7	15	7	—	—	6	14
News vendors	9	14	23	22	10	22	15	15
Administrative support occupations, including clerical	122	120	147	136	97	107	115	96
Supervisors, administrative support occupations	—	7	5	7	—	—	6	—
Secretaries, stenographers, and typists	14	19	13	21	10	8	12	7
Secretaries	13	19	12	21	10	7	12	6
Information clerks	10	—	19	13	—	7	13	7
Records processing occupations, except financial	—	—	—	6	—	—	7	—
Financial records processing occupations	6	8	15	7	6	5	5	5
Bookkeepers, accounting and auditing clerks	5	6	11	—	5	5	—	—
Mail and message distributing occupations	24	29	37	25	19	28	25	30
Mail carriers, postal service	9	12	7	11	8	7	12	12
Messengers	12	12	25	8	9	14	9	17

See footnotes at end of table.

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Occupation – continued								
Material recording, scheduling, and distributing clerks	25	20	28	23	22	27	23	19
Dispatchers	—	5	6	—	—	6	—	—
Traffic, shipping, and receiving clerks	8	8	7	6	5	8	10	—
Stock and inventory clerks	6	—	—	7	6	10	6	8
Adjusters and investigators	8	9	5	9	14	6	—	10
Miscellaneous administrative support	23	21	21	22	17	17	19	12
General office clerks	15	13	8	13	11	7	5	6
Service occupations	544	548	605	546	500	492	443	470
Private household occupations	7	7	12	5	11	—	6	—
Private household cleaners and servants	—	—	6	—	6	—	—	—
Protective service occupations	283	295	332	321	251	283	261	263
Firefighting and fire prevention occupations, including supervisors	36	40	56	41	37	49	46	58
Fire inspection and fire prevention occupations	6	—	—	—	—	—	—	—
Firefighting occupations	29	37	50	35	35	45	44	48
Police and detectives, including supervisors	141	151	149	176	114	156	139	132
Police and detectives, public services	95	102	102	121	77	97	87	79
Sheriffs, bailiffs, and other law enforcement officers	35	29	28	37	29	36	34	39
Correctional institution officers	5	12	7	12	5	16	9	8
Guards, including supervisors	106	104	127	104	100	78	76	73
Crossing guards	—	8	7	5	5	6	—	—
Guards and police, except public service	94	89	113	93	83	68	66	63
Service occupations, except protective and household	254	245	261	220	238	205	176	203
Food preparation and service occupations	85	76	82	74	53	63	50	66
Supervisors, food preparation and service occupations	16	5	8	5	5	—	10	—
Bartenders	14	8	19	15	11	—	6	12
Waiters and waitresses	11	13	16	8	11	10	8	7
Cooks	19	16	18	24	11	26	13	19
Food counter, fountain and related occupations	11	9	8	7	5	9	—	—
Kitchen workers, food preparation	—	8	—	5	—	—	7	5
Miscellaneous food preparation occupations	8	14	9	8	5	7	—	12
Health service occupations	21	17	27	33	29	20	17	17
Nursing aides, orderlies, and attendants	16	12	21	26	24	15	15	13
Cleaning and building service occupations, except household	106	108	95	76	78	85	69	81
Supervisors, cleaning and building services workers	8	11	8	—	6	5	—	—
Maids and housemen	10	7	—	—	—	6	5	9
Janitors and cleaners	84	84	80	67	64	73	56	64
Pest control occupations	—	6	—	—	—	—	—	—
Personal service occupations	42	44	57	37	78	37	40	39
Barbers	—	—	—	5	—	—	—	5
Hairdressers and cosmetologists	7	7	—	7	—	7	—	—
Attendants, amusement and recreation facilities	9	7	18	7	11	6	7	13
Guides	9	11	—	—	—	6	11	5
Public transportation attendants	6	—	8	—	38	—	—	—
Farming, forestry, and fishing	936	966	949	869	891	925	930	897
Farming operators and managers	344	412	379	334	379	387	374	362
Farmers, except horticultural	259	330	261	244	305	296	281	233
Horticultural specialty farmers	6	7	12	17	9	16	11	11
Managers, farms, except horticultural	69	67	102	73	61	72	81	118
Managers, horticultural specialty farms	10	8	—	—	—	—	—	—
Other agricultural and related occupations	344	321	366	359	303	350	365	335
Farm occupations, except managerial	263	217	268	267	194	229	242	211
Supervisors, farm workers	55	25	10	18	22	13	17	7
Farm workers	205	187	256	243	169	200	221	199
Nursery workers	—	—	—	5	—	16	—	—
Related agricultural occupations	81	104	98	92	109	121	123	124
Supervisors, related agricultural occupations	10	11	10	5	13	11	10	8

See footnotes at end of table.

Occupational Injuries and Illnesses and Work-related Fatalities

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Occupation – continued								
Groundskeepers and gardeners, except farm	68	87	79	78	91	104	108	106
Animal caretakers, except farm	—	6	7	8	—	—	—	9
Forestry and logging occupations	155	142	137	116	135	128	119	122
Supervisors, forestry, and logging workers	13	11	19	12	10	11	20	12
Forestry workers, except logging	9	7	6	6	6	7	9	8
Timber cutting and logging occupations	133	124	112	98	119	110	90	102
Fishers, hunters, and trappers	93	91	67	60	74	60	72	78
Fishers, including vessel captains and officers	92	91	67	58	74	58	71	78
Precision production, craft, and repair								
Mechanics and repairers	1,087	1,113	1,096	1,054	1,085	1,095	1,094	1,148
Supervisors, mechanics and repairers	284	326	298	273	286	327	291	358
Mechanics and repairers, except supervisors	19	28	22	26	14	17	12	22
Vehicle and mobile equipment mechanics, repairers	265	298	276	247	272	310	279	336
Automobile mechanics and apprentices	116	141	114	120	134	136	140	159
Bus, truck, and stationary engine mechanics	39	61	50	49	35	49	48	49
Aircraft engine mechanics	27	26	17	22	35	31	39	39
Automobile body and related repairers	5	8	6	5	8	6	8	9
Heavy equipment mechanics	12	5	12	10	11	11	8	9
Farm equipment mechanics	20	33	24	24	38	32	28	43
Industrial machinery repairers	—	—	—	—	—	—	5	5
Machinery maintenance occupations	23	24	17	16	20	32	18	27
Electrical and electronic equipment repairers	12	11	11	6	5	12	—	7
Electronic repairers, communications and industrial equipment	44	41	38	31	32	36	43	44
Household appliance and power tool repairers	13	19	19	13	15	10	25	22
Telephone line installers and repairers	—	—	—	5	—	7	8	—
Telephone installers and repairers	8	—	7	—	—	10	6	7
Miscellaneous electrical and electronic equipment repairers	6	7	—	—	7	—	—	8
Heating, air conditioning, and refrigeration mechanics	10	9	5	5	—	6	—	5
Miscellaneous mechanics and repairers	19	16	12	17	21	14	17	24
Office machine repairers	51	65	84	57	60	80	58	75
Elevator installers and repairers	—	—	—	—	—	—	—	8
Millwrights	6	6	7	8	—	11	5	7
Construction trades	13	—	14	11	12	13	—	7
Supervisors, construction occupations	590	570	615	610	598	592	633	633
Supervisors, carpenters and related workers	91	95	111	89	85	73	89	91
Supervisors, electricians and power transmission installers	12	6	5	—	—	7	—	7
Supervisors, painters, paperhangers, and plasterers	—	7	5	6	—	10	7	12
Supervisors, plumbers, pipefitters, and steamfitters	—	—	6	—	—	—	—	—
Supervisors, n.e.c.	—	—	5	—	6	—	—	—
Construction trades, except supervisors	64	78	87	74	68	49	73	66
Brickmasons, stonemasons, and apprentices	499	475	504	521	513	519	544	542
Carpenters and apprentices	11	20	12	23	12	13	14	21
Drywall installers	92	91	87	96	89	97	91	103
Electricians and apprentices	—	10	9	8	8	7	6	10
Electrical power installers and repairers	89	72	99	118	99	94	124	105
Painters, construction and maintenance	37	42	35	36	39	48	34	34
Plumbers, pipefitters, steamfitters, and apprentices	45	51	40	45	44	39	41	38
Insulation workers	33	41	40	33	34	36	33	39
Paving, surfacing, and tamping equipment operators	—	—	7	—	—	8	10	—
Roofers	8	5	—	—	—	—	6	8
Structural metal workers	50	47	53	60	61	55	50	59
Drillers, earth	47	34	48	38	52	45	52	43
Extractive occupations	—	5	7	—	8	10	8	6
Supervisors, extractive occupations	86	97	76	67	87	75	61	47
Drillers, oil wells	13	12	11	—	10	14	10	7
Mining machine operators	10	27	22	17	22	11	15	—
Precision production occupations	38	25	29	28	28	21	20	20
	127	120	107	104	114	101	109	110

See footnotes at end of table.

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Occupation – continued								
Precision metal working occupations	39	32	35	27	32	24	34	39
Machinists	15	12	15	9	9	13	18	17
Boilermakers	7	6	7	6	—	—	—	7
Sheet metal workers	7	7	7	7	9	6	10	9
Precision woodworking occupations	6	—	—	6	—	—	—	—
Precision textile, apparel, and furnishings machine workers	—	—	—	—	—	—	6	—
Precision workers, assorted materials	—	—	—	—	6	6	—	—
Precision food production occupations	13	12	—	—	8	7	—	—
Butchers and meat cutters	9	6	—	—	6	—	—	—
Bakers	—	5	—	—	—	—	—	—
Precision inspectors, testers, and related workers	—	—	7	—	—	—	—	—
Inspectors, testers, and graders	—	—	5	—	—	—	—	—
Plant and system operators	26	24	19	25	20	28	13	15
Water and sewage treatment plant operators	5	—	—	7	—	13	—	5
Stationary engineers	7	11	6	8	7	5	5	—
Operators, fabricators, and laborers	1,919	1,980	2,072	2,072	2,043	2,170	2,159	2,196
Machine operators, assemblers, and inspectors	227	207	258	239	221	222	222	216
Machine operators and tenders, except precision	140	125	163	145	136	127	135	125
Metal working and plastic working machine operators	9	6	15	11	17	7	10	11
Metal and plastic processing machine operators	9	11	—	10	—	7	6	—
Molding and casting machine operators	—	9	—	6	—	—	—	—
Woodworking machine operators	17	14	15	10	10	13	9	7
Sawing machine operators	15	10	10	7	8	10	6	—
Printing machine operators	9	5	—	7	—	—	—	—
Printing press operators	5	—	—	6	—	—	—	—
Textile, apparel, and furnishings machine operators	11	7	10	13	—	6	8	9
Textile sewing machine operators	—	5	—	—	—	—	—	—
Laundering and dry cleaning machine operators	—	—	—	7	—	—	5	6
Machine operators, assorted materials	84	80	114	93	97	89	100	89
Packaging and filling machine operators	—	—	6	—	—	—	—	—
Mixing and blending machine operators	5	—	9	—	6	—	—	—
Separating, filtering, and clarifying machine operators	—	—	—	5	7	—	5	6
Painting and paint spraying machine operators	—	—	9	7	—	7	—	5
Furnace, kiln, and oven operators, except food	10	8	8	7	6	5	9	—
Crushing and grinding machine operators	—	—	5	—	—	—	6	5
Slicing and cutting machine operators	—	—	—	5	—	—	8	—
Miscellaneous machine operators, n.e.c.	26	24	37	24	33	32	35	31
Machine operators, not specified	24	27	29	30	29	27	22	24
Fabricators, assemblers, and hand working occupations	76	74	87	87	75	83	80	82
Welders and cutters	65	58	67	72	63	61	65	67
Assemblers	9	10	12	10	9	15	12	12
Production inspectors, testers, samplers, and weighers	11	8	8	7	10	12	7	9
Transportation and material moving occupations	1,121	1,195	1,182	1,163	1,178	1,277	1,262	1,322
Motor vehicle operators	875	928	931	932	928	1,032	1,025	1,064
Truck drivers	701	740	767	759	797	862	883	899
Driver-sales workers	46	42	30	35	35	44	36	42
Bus drivers	14	15	11	18	11	13	13	36
Taxicab drivers and chauffeurs	106	113	113	100	66	100	82	74
Parking lot attendants	—	5	—	8	—	5	—	—
Transportation occupations, except motor vehicles	83	86	77	64	72	76	40	53
Rail transportation occupations	27	42	31	25	22	27	15	24
Railroad conductors and yardmasters	6	12	9	16	—	10	—	15
Locomotive operating occupations	—	12	7	6	11	8	5	—
Railroad brake, signal, and switch operators	13	17	11	—	7	9	5	6
Water transportation occupations	56	44	46	39	50	49	25	29
Ship captains and mates, except fishing boats	14	11	13	—	10	14	—	12
Sailors and deckhands	41	31	29	31	38	32	18	16
Material moving equipment operators	163	181	174	167	178	169	197	205
Operating engineers	37	39	42	44	38	47	46	57

See footnotes at end of table.

Occupational Injuries and Illnesses and Work-related Fatalities

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Occupation – continued								
Hoist and winch operators	10	9	12	12	12	7	14	8
Crane and tower operators	13	13	11	15	14	15	12	14
Excavating and loading machine operators	13	22	22	16	26	23	24	21
Grader, dozer, and scraper operators	22	27	23	23	19	15	20	26
Industrial truck and tractor equipment operators	41	44	39	33	46	36	46	56
Handlers, equipment cleaners, helpers, and laborers	571	578	632	670	644	671	675	658
Helpers, mechanics and repairers	6	6	—	5	5	—	6	6
Helpers, construction and extractive occupations	13	15	22	10	14	14	19	15
Helpers, construction trades	11	11	16	7	12	11	17	14
Construction laborers	228	236	247	311	294	333	335	341
Production helpers	6	—	12	12	—	8	5	6
Freight, stock, and material handlers	84	81	76	76	71	68	80	65
Garbage collectors	20	18	23	29	21	21	25	19
Stevedores	5	10	—	6	6	11	11	9
Stock handlers and baggers	29	21	17	13	23	11	10	12
Machine feeders and offbearers	7	8	—	5	—	—	—	—
Garage and service station related occupations	31	34	23	28	17	19	24	14
Vehicle washers and equipment cleaners	9	7	15	12	12	13	12	14
Hand packers and packagers	8	—	—	—	6	—	—	—
Laborers, except construction	176	188	229	213	218	210	193	193
Industry								
Private industry	5,497	5,643	5,959	5,495	5,597	5,616	5,457	5,461
Agriculture, forestry and fishing								
Agricultural production - crops	808	864	852	800	806	833	840	807
Agricultural production - crops	405	400	443	363	337	373	380	350
Cash grains	20	44	29	28	26	31	31	21
Wheat	—	—	—	—	7	—	—	—
Corn	—	5	—	6	6	23	—	—
Cash grains, n.e.c.	5	5	7	—	8	—	6	—
Field crops, except cash grains	15	21	26	34	43	53	33	46
Cotton	5	—	8	5	—	—	—	—
Tobacco	—	—	—	—	—	5	5	9
Sugarcane and sugar beets	—	8	—	—	5	—	—	—
Irish potatoes	—	—	7	—	—	—	—	—
Field crops, except grains, n.e.c.	—	7	6	9	14	24	16	12
Vegetables and melons	9	14	10	7	8	10	13	9
Fruits and tree nuts	19	24	20	26	14	24	23	29
Grapes	—	—	6	6	—	—	—	—
Tree nuts	—	—	—	—	—	6	—	—
Citrus fruits	—	5	—	6	5	—	—	—
Deciduous tree fruits	—	12	—	7	6	6	10	7
Fruits and tree nuts, n.e.c.	—	—	—	—	—	—	—	13
Horticultural specialties	8	8	14	—	9	8	11	13
Ornamental nursery products	5	7	10	—	9	8	10	12
General farms, primarily crop	224	185	248	209	199	224	249	215
Agricultural production - livestock	165	214	172	162	157	183	174	163
Livestock, except dairy and poultry	48	61	49	66	62	63	58	63
Beef cattle feedlots	—	10	7	8	9	12	6	6
Beef cattle, except feedlots	21	25	23	31	30	42	37	49
Hogs	6	5	5	9	—	5	6	—
General livestock, n.e.c.	9	9	—	—	7	—	5	—
Dairy farms	53	75	70	47	57	60	35	50
Poultry and eggs	6	5	8	8	—	13	12	13
Broiler, fryer, and roaster chickens	—	—	—	5	—	5	—	6
Animal specialties	—	8	8	7	—	6	10	8
Horses and other equines	—	—	—	—	—	—	7	7
General farms, primarily animal	42	52	24	28	21	37	54	23

See footnotes at end of table.

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Industry – continued								
Agricultural services	137	155	163	156	172	178	170	164
Soil preparation services	—	—	5	—	—	—	—	—
Crop services	30	31	38	36	28	47	29	31
Crop planting and protecting	9	17	23	23	19	28	11	18
Crop harvesting	—	—	—	—	—	7	8	5
Crop preparation services for market	—	—	8	—	—	8	8	—
Cotton ginning	5	—	—	6	—	—	—	—
Veterinary services	—	—	—	6	5	—	—	—
Animal services, except veterinary	5	8	6	9	5	7	8	6
Animal specialty services	—	6	6	8	5	—	7	6
Farm labor and management services	9	11	10	13	11	11	18	9
Farm labor contractors	—	—	8	11	9	10	16	6
Landscape and horticultural services	86	93	100	92	123	110	112	107
Landscape counseling and planning	9	6	14	6	10	5	12	—
Lawn and garden services	18	18	29	34	40	34	47	35
Ornamental shrub and tree services	35	53	43	40	68	66	51	60
Forestry	18	8	10	14	11	6	13	8
Timber tracts	9	—	6	6	7	—	7	5
Forestry services	8	—	—	5	—	—	5	—
Fishing, hunting, and trapping	83	87	64	63	75	63	75	81
Commercial fishing	79	84	64	60	73	61	71	79
Finfish	33	31	17	20	25	19	29	16
Shellfish	33	42	27	32	27	28	33	48
Miscellaneous marine products	5	—	—	—	7	5	—	—
Mining	181	174	180	156	153	158	147	121
Metal mining	12	17	16	13	12	14	11	12
Copper ores	—	7	—	—	—	—	—	—
Gold and silver ores	6	5	9	—	7	6	—	6
Gold ores	6	5	7	—	6	6	—	5
Coal mining	60	40	41	43	39	32	30	35
Bituminous coal and lignite mining	51	39	38	38	36	32	26	28
Bituminous coal and lignite-surface	12	7	19	6	6	5	6	9
Bituminous coal-underground	34	32	18	32	26	24	20	19
Oil and gas extraction	82	94	99	77	83	85	76	50
Crude petroleum and natural gas	10	14	9	9	11	8	9	11
Oil and gas field services	70	79	85	68	72	76	63	39
Drilling oil and gas wells	27	22	24	20	27	28	20	7
Oil and gas exploration services	—	—	5	7	—	—	6	7
Oil and gas field services, n.e.c.	41	53	55	40	39	44	37	25
Nonmetallic minerals, except fuels	27	23	24	23	19	27	30	24
Crushed and broken stone	10	6	13	9	9	9	12	8
Crushed and broken limestone	5	—	7	—	6	5	6	8
Sand and gravel	10	7	8	5	7	11	11	11
Construction sand and gravel	9	6	7	5	6	8	10	10
Chemical and fertilizer minerals	—	—	—	7	—	—	—	—
Potash, soda, and borate minerals	—	—	—	5	—	—	—	—
Construction	919	932	1,028	1,055	1,047	1,107	1,174	1,190
General building contractors	175	156	190	176	184	194	213	183
Residential building construction	84	66	83	84	83	89	115	98
Single-family housing construction	42	40	50	64	65	65	87	79
Residential construction, n.e.c.	14	11	20	14	9	16	20	14
Nonresidential building construction	73	70	96	82	88	92	79	76
Industrial buildings and warehouses	21	28	37	29	33	33	24	30
Nonresidential construction, n.e.c.	41	33	48	48	51	53	51	44
Heavy construction, except building	241	255	246	246	248	252	272	280
Highway and street construction	92	72	76	90	91	82	104	86
Heavy construction, except highway	138	176	165	155	155	163	167	189
Bridge, tunnel, and elevated highway	23	26	20	30	19	22	19	20

See footnotes at end of table.

Occupational Injuries and Illnesses and Work-related Fatalities

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Industry – continued								
Water, sewer, and utility lines	56	86	90	63	77	72	96	103
Heavy construction, n.e.c.	58	63	55	61	54	69	50	64
Special trades contractors	503	521	592	618	606	648	680	709
Plumbing, heating and air-conditioning	53	48	71	63	64	61	65	66
Painting and paper hanging	37	39	40	47	41	45	42	36
Electrical work	75	68	78	92	72	82	115	107
Masonry, stonework, tile setting, and plastering	32	42	53	66	52	42	53	57
Masonry and other stonework	20	24	15	36	26	23	27	36
Plastering, drywall, and insulation	11	14	26	24	25	17	22	20
Terrazzo, tile, marble, mosaic work	—	—	10	5	—	—	—	—
Carpentry and floor work	36	40	31	38	37	44	42	46
Carpentry work	30	35	28	37	29	39	37	43
Floor laying and floor work, n.e.c.	—	5	—	—	6	—	5	—
Roofing, siding, and sheet metal work	80	84	89	97	99	104	91	96
Concrete work	21	18	34	34	29	32	28	42
Water well drilling	5	10	8	—	11	10	10	5
Miscellaneous special trade contractors	161	159	183	174	199	223	227	244
Structural steel erection	42	41	52	42	55	48	57	56
Glass and glazing work	—	—	—	—	7	—	7	—
Excavation work	35	33	47	39	50	50	42	43
Wrecking and demolition work	22	14	22	19	15	27	20	22
Installing building equipment, n.e.c.	14	14	12	10	16	17	12	20
Special trade contractors, n.e.c.	45	56	47	61	55	77	87	99
Manufacturing								
Food and kindred products	765	767	789	709	725	744	698	719
Food and kindred products	92	84	79	75	73	78	72	83
Meat products	28	19	15	21	29	16	23	25
Meat packing plants	18	12	—	11	15	5	5	8
Sausages and other prepared meats	—	—	—	—	—	—	—	5
Poultry slaughtering and processing	6	6	9	9	12	9	14	12
Dairy products	5	6	5	5	—	7	6	7
Fluid milk	—	—	—	—	—	5	—	—
Preserved fruits and vegetables	11	10	9	6	—	—	10	5
Grain mill products	12	12	13	15	9	15	8	11
Prepared feeds, n.e.c.	5	—	8	5	6	12	6	—
Bakery products	—	8	7	9	9	7	5	11
Sugar and confectionery products	6	8	5	—	—	10	—	—
Fats and oils	—	5	—	—	6	—	6	6
Beverages	12	8	11	—	6	5	—	10
Miscellaneous food and kindred products	14	8	13	12	—	10	8	5
Fresh or frozen prepared fish	—	—	—	5	—	—	—	—
Food preparations, n.e.c.	—	—	—	5	—	5	5	—
Tobacco products	—	—	—	—	—	—	5	—
Textile mill products	8	19	12	9	12	12	9	10
Apparel and other textile products	10	12	8	5	6	7	9	10
Miscellaneous fabricated textile products	—	—	—	—	—	—	6	—
Lumber and wood products	228	205	199	183	204	199	172	190
Logging	166	147	130	139	156	136	125	138
Sawmills and planing mills	41	29	35	22	28	32	24	21
Sawmills and planing mills, general	38	28	28	16	24	25	20	18
Hardwood dimension and flooring mills	—	—	—	5	—	—	—	—
Millwork, plywood and structural members	12	12	13	10	7	15	11	13
Millwork	5	—	5	—	—	—	—	—
Wood kitchen cabinets	—	—	6	—	—	—	—	—
Hardwood veneer and plywood	—	—	—	—	—	5	—	—
Wood containers	—	—	6	—	—	—	5	6
Wood buildings and mobile homes	—	—	6	—	5	—	—	5
Miscellaneous wood products	5	9	7	7	5	10	—	—
Furniture and fixtures	17	8	11	11	10	7	12	7
Household furniture	10	—	7	5	5	5	9	6

See footnotes at end of table.

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Industry – continued								
Paper and allied products	28	15	33	28	19	24	16	27
Paper mills	10	—	14	7	6	11	9	6
Paperboard mills	—	—	—	—	—	—	—	5
Paperboard containers and boxes	7	—	11	8	8	6	—	7
Miscellaneous converted paper products	—	—	—	9	—	5	—	8
Printing and publishing	32	38	28	42	31	35	28	25
Newspapers	14	21	18	24	22	25	16	14
Commercial printing	15	9	5	11	5	—	7	8
Commercial printing, lithographic	8	6	—	5	—	—	—	—
Chemicals and allied products	34	32	46	38	26	33	48	47
Industrial inorganic chemicals	6	—	9	8	5	6	8	5
Plastics materials and synthetics	6	5	10	—	—	5	—	—
Drugs	—	—	—	10	—	6	—	—
Medicinals and botanicals	—	—	—	7	—	—	—	—
Pharmaceutical preparations	—	—	—	—	—	5	—	—
Soap, cleaners, and toilet goods	—	—	—	5	—	—	5	—
Industrial organic chemicals	5	—	—	—	—	7	7	11
Agricultural chemicals	5	—	7	—	—	—	—	—
Miscellaneous chemical products	6	7	8	9	9	—	18	15
Explosives	—	—	—	—	—	—	5	—
Petroleum and coal products	10	17	10	19	13	11	18	9
Petroleum refining	7	15	5	13	9	—	10	5
Asphalt paving and roofing materials	—	—	—	5	—	6	6	—
Rubber and miscellaneous plastics products	32	29	34	23	21	22	16	19
Tires and inner tubes	—	—	5	—	—	—	—	—
Fabricated rubber products, n.e.c.	—	—	—	6	—	—	—	—
Miscellaneous plastics products, n.e.c.	24	23	24	14	17	17	14	15
Stone, clay, glass and concrete products	43	53	41	40	53	48	50	44
Glass and glassware, pressed or blown	—	—	—	—	5	—	—	—
Concrete, gypsum, and plaster products	29	37	24	25	29	31	37	34
Concrete block and brick	7	7	—	5	—	—	—	5
Ready-mixed concrete	9	14	13	11	20	19	17	16
Cut stone and stone products	—	—	6	—	9	6	—	—
Miscellaneous nonmetallic mineral products	—	—	—	5	—	—	—	—
Primary metal industries	63	71	64	54	68	59	46	50
Blast furnace and basic steel products	26	32	36	25	32	25	23	18
Blast furnaces and steel mills	18	24	26	17	26	17	18	14
Iron and steel foundries	7	10	8	8	17	17	6	16
Gray and ductile iron foundries	—	8	—	7	9	10	—	11
Primary nonferrous metals	8	5	—	—	—	—	5	—
Secondary nonferrous metals	—	5	6	—	5	—	—	—
Nonferrous rolling and drawing	7	6	7	7	6	—	—	—
Copper rolling and drawing	—	5	—	—	—	—	—	—
Nonferrous foundries (castings)	—	9	—	6	—	5	—	—
Fabricated metal products	39	46	51	47	54	50	49	46
Fabricated structural metal products	17	19	22	20	21	28	30	21
Fabricated structural metal	7	—	5	7	12	11	11	8
Fabricated plate work (boiler shops)	5	5	8	—	—	7	7	6
Sheet metal work	—	5	—	—	—	—	—	—
Metal forgings and stampings	7	6	11	6	8	8	6	—
Iron and steel forgings	—	—	—	—	5	—	—	—
Automotive stampings	—	—	8	5	—	—	—	—
Metal services, n.e.c.	—	7	9	8	11	5	5	8
Miscellaneous fabricated metal products	5	—	—	7	8	9	—	10
Industrial machinery and equipment	44	44	69	47	45	69	63	54
Engines and turbines	—	—	—	—	—	5	—	—
Construction and related machinery	9	9	20	17	14	24	12	17
Construction machinery	—	6	6	8	—	9	—	9
Oil and gas field machinery	—	—	6	—	5	—	—	—
Metalworking machinery	—	9	15	7	5	9	9	12

See footnotes at end of table.

Occupational Injuries and Illnesses and Work-related Fatalities

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Industry – continued								
Special industry machinery	5	—	5	—	—	—	—	—
General industrial machinery	—	—	5	—	—	—	8	—
Computer and office equipment	—	—	—	—	—	—	6	—
Refrigeration and service machinery	5	—	—	—	—	—	6	—
Industrial machinery, n.e.c.	10	8	13	10	8	16	14	11
Electronic and other electronic equipment	20	18	24	16	16	13	10	13
Communications equipment	—	—	6	—	—	—	—	—
Electronics components and accessories	6	6	9	8	—	6	—	—
Transportation equipment	45	55	51	51	54	57	61	68
Motor vehicles and equipment	12	16	17	18	18	24	24	33
Motor vehicles and car bodies	5	5	7	6	6	7	5	12
Motor vehicle parts and accessories	—	8	6	7	10	15	8	12
Aircraft and parts	14	15	7	10	14	10	—	9
Ship and boat building and repairing	15	18	18	10	15	17	27	20
Miscellaneous transportation equipment	—	—	—	5	5	5	—	—
Instruments and related products	9	6	13	9	—	—	5	—
Search and navigation equipment	—	—	5	—	—	—	—	—
Measuring and controlling devices	—	—	5	—	—	—	—	—
Medical instruments and supplies	—	—	—	5	—	—	—	—
Miscellaneous manufacturing industries	9	15	14	7	10	14	8	11
Toys and sporting goods	—	—	—	—	—	—	—	5
Miscellaneous manufactures	7	11	12	5	8	13	7	6
Transportation and public utilities								
Railroad transportation	895	894	949	901	970	1,008	911	1,006
Railroads	30	44	31	35	31	33	17	32
Local and interurban passenger transportation	30	44	31	34	31	33	16	32
Local and suburban transportation	126	130	114	117	79	106	85	102
Local and suburban transportation	16	11	8	17	11	11	18	20
Taxis	100	106	102	92	60	93	63	66
Bus charter service	—	—	—	5	5	—	—	6
School buses	—	—	—	—	—	—	—	7
Trucking and warehousing	450	471	505	476	520	573	564	605
Trucking and courier services, except air	412	429	475	439	482	520	538	562
Local trucking, without storage	110	109	110	109	111	128	148	140
Trucking, except local	173	211	280	276	282	329	328	361
Local trucking with storage	7	—	8	11	8	9	9	8
Courier services, except by air	21	13	17	8	31	28	10	19
Public warehousing and storage	13	19	18	11	15	28	14	21
Farm product warehousing and storage	6	6	6	—	—	8	—	6
General warehousing and storage	—	5	6	8	8	12	11	7
Trucking terminal facilities	—	—	8	7	8	5	6	8
Water transportation	70	51	48	52	69	72	52	55
Deep sea foreign transportation of freight	11	5	6	8	9	16	9	6
Deep sea domestic transportation of freight	—	—	—	—	—	5	—	—
Water transportation of freight, n.e.c.	9	—	7	6	13	—	7	6
Water transportation of passengers	—	—	—	—	8	—	—	—
Deep sea transportation of passengers, except by ferry	—	—	—	—	8	—	—	—
Water transportation services	44	40	30	30	36	46	32	39
Marine cargo handling	12	12	12	13	15	19	20	17
Towing and tugboat services	20	16	8	7	11	12	7	11
Marinas	—	—	—	—	6	—	—	5
Transportation by air	90	79	99	80	115	83	74	74
Air transportation, scheduled	24	33	45	26	72	23	23	21
Air transportation, scheduled	19	24	36	15	67	10	8	13
Air courier services	—	5	7	8	—	13	13	6
Air transportation, nonscheduled	42	27	35	39	32	44	41	41
Airports, flying fields, and services	19	19	18	12	8	16	10	10
Transportation services	15	21	29	22	17	23	13	21
Passenger transportation arrangement	—	—	13	6	—	—	—	5
Freight transportation arrangement	11	11	10	10	9	12	8	8

See footnotes at end of table.

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Industry – continued								
Miscellaneous transportation services	—	6	5	6	6	8	—	8
Communications	24	25	32	25	42	25	19	30
Telephone communications	17	14	14	11	19	15	6	18
Telephone communications, except radio	15	11	10	9	16	11	6	14
Radio and television broadcasting	—	7	9	5	10	—	—	6
Cable and other pay television services	—	—	8	7	10	5	10	5
Electric, gas, and sanitary services	86	72	89	91	89	89	83	86
Electric services	37	23	35	34	29	34	27	24
Gas production and distribution	—	7	9	—	13	6	6	7
Combination utility services	16	11	8	6	7	10	9	5
Electric and other services combined	10	6	6	—	—	6	5	—
Sanitary services	26	30	33	46	35	34	39	45
Refuse systems	21	27	26	42	34	32	31	38
Wholesale trade	253	252	271	256	270	241	229	237
Wholesale trade-durable goods	140	139	158	158	154	140	138	132
Motor vehicles, parts, and supplies	23	16	24	31	31	26	27	23
Automobiles and other motor vehicles	—	—	5	5	—	10	7	7
Motor vehicle supplies and new parts	10	6	8	11	14	5	10	7
Tires and tubes	—	—	—	6	—	—	—	—
Furniture and homefurnishings	7	—	6	6	—	5	—	—
Lumber and construction materials	13	18	25	12	16	20	12	12
Professional and commercial equipment	5	13	14	10	8	6	10	13
Metals and minerals, except petroleum	8	9	8	5	5	5	5	11
Electrical goods	9	—	6	10	13	6	7	10
Hardware, plumbing and heating equipment	18	10	9	7	10	6	9	5
Machinery, equipment, and supplies	30	31	29	33	27	23	27	28
Miscellaneous durable goods	27	34	37	44	40	43	39	25
Toys and hobby goods and supplies	—	—	—	—	—	5	—	—
Scrap and waste materials	22	25	34	39	31	33	30	22
Wholesale trade-nondurable goods	113	113	113	97	116	100	91	105
Paper and paper products	—	—	6	—	7	—	—	—
Drugs, proprietaries, and sundries	—	—	—	—	—	—	—	5
Groceries and related products	36	42	39	33	37	32	28	44
Packaged frozen foods	—	—	—	—	—	5	—	—
Dairy products, except dried or canned	—	7	—	—	—	—	—	—
Fresh fruits and vegetables	—	7	—	6	—	7	—	6
Farm-product raw materials	10	17	20	13	11	14	17	10
Chemicals and allied products	6	5	—	—	9	—	—	—
Petroleum and petroleum products	21	13	13	19	18	16	22	16
Petroleum bulk stations and terminals	5	5	—	5	8	5	—	8
Petroleum and petroleum products wholesalers, except bulk stations and terminals	13	7	9	13	10	10	18	7
Beer, wine, and distilled beverages	6	11	—	5	—	5	5	5
Miscellaneous nondurable goods	21	21	24	19	26	22	15	16
Retail trade	734	795	808	687	681	670	570	507
Building materials and garden supplies	30	32	43	37	40	28	43	29
Lumber and other building materials	13	20	25	26	24	17	26	19
Hardware stores	9	—	—	—	—	—	6	—
Retail nurseries and garden stores	—	—	6	—	6	—	—	—
Mobile home dealers	5	5	7	—	7	—	7	5
General merchandise stores	26	26	33	19	25	16	27	24
Department stores	11	14	15	8	9	6	13	14
Variety stores	6	5	—	6	8	5	—	5
Miscellaneous general merchandise stores	9	5	14	5	7	5	10	5
Food stores	212	227	237	190	180	192	135	115
Grocery stores	187	201	218	175	168	172	120	94
Meat and fish markets	—	—	—	—	5	—	—	—
Retail bakeries	11	13	11	6	5	6	6	8

See footnotes at end of table.

Occupational Injuries and Illnesses and Work-related Fatalities

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Industry – continued								
Automotive dealers and service stations	115	139	123	125	98	115	120	82
New and used car dealers	23	30	34	27	31	20	37	14
Used car dealers	7	7	11	18	10	14	15	—
Auto and home supply stores	20	23	17	23	18	23	14	22
Gasoline service stations	54	68	55	49	36	43	40	28
Boat dealers	—	—	—	—	—	—	—	5
Motorcycle dealers	—	—	—	—	—	6	8	—
Apparel and accessory stores	22	23	12	20	12	10	11	5
Family clothing stores	5	7	—	11	—	7	—	—
Shoe stores	—	5	—	—	—	—	—	—
Miscellaneous apparel and accessory stores	5	—	—	—	—	—	—	—
Furniture and homefurnishings stores	13	25	34	21	32	28	25	16
Furniture and homefurnishings stores	6	10	16	11	18	18	14	6
Radio, television, and computer stores	6	11	16	9	13	7	8	8
Eating and drinking places	190	201	184	168	166	151	107	145
Eating places	114	115	121	95	93	106	69	96
Drinking places	37	39	39	38	58	29	27	39
Miscellaneous retail	126	122	142	104	126	126	101	91
Drug stores and proprietary stores	—	8	7	6	7	8	5	5
Liquor stores	24	23	23	18	18	20	23	20
Used merchandise stores	17	16	22	10	15	30	11	8
Miscellaneous shopping goods stores	32	24	19	15	28	19	18	14
Sporting goods and bicycle shops	10	7	—	—	12	7	6	—
Jewelry stores	9	8	10	5	8	—	7	6
Gift, novelty, and souvenir shops	5	—	—	—	—	—	—	—
Nonstore retailers	18	23	34	20	25	18	21	19
Direct selling establishments	12	17	32	17	21	15	17	16
Fuel dealers	16	10	10	20	10	17	7	—
Fuel oil dealers	—	—	—	8	—	5	—	—
Liquefied petroleum gas dealers	10	5	5	11	6	12	—	—
Retail stores, n.e.c.	13	16	26	14	23	14	16	20
Florists	5	5	7	—	7	—	—	—
Finance, insurance, and real estate								
Depository institutions	122	118	113	125	116	97	92	105
Commercial banks	21	10	22	31	16	14	20	13
Credit unions	13	7	18	8	9	8	14	6
Functions closely related to banking	—	—	—	19	—	—	—	—
Nondepository institutions	5	—	—	—	5	—	—	—
Security and commodity brokers	—	—	6	—	5	9	5	6
Security brokers and dealers	5	8	—	7	7	—	—	7
Insurance carriers	—	6	—	—	—	—	—	6
Life insurance	14	13	15	8	11	10	8	10
Medical service and health insurance	8	—	5	—	5	—	—	5
Fire, marine, and casualty insurance	—	—	—	—	—	5	6	—
Insurance agents, brokers, and service	17	15	12	11	20	10	12	14
Real estate	61	66	51	66	57	48	42	48
Real estate operators and lessors	29	35	31	36	29	21	23	28
Nonresidential building operators	5	5	—	8	8	6	5	—
Apartment building operators	13	23	21	22	16	11	12	19
Mobile home site operators	—	—	6	—	—	—	—	—
Real estate agents and managers	27	27	16	23	24	23	16	13
Subdividers and developers	5	—	—	5	—	—	—	6
Holdings and other investment offices	—	5	—	—	—	—	—	7
Miscellaneous investing	—	—	—	—	—	—	—	6
Services								
Hotels and other lodging places	757	774	853	749	776	727	763	732
Hotels and motels	52	33	44	33	32	44	36	37
Camps and recreational vehicle parks	40	25	37	27	31	41	30	29
—	9	7	7	5	—	—	—	7

See footnotes at end of table.

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Industry – continued								
Personal services	47	31	32	39	39	35	50	42
Laundry, cleaning, and garment services	26	13	13	19	18	12	23	23
Beauty shops	7	9	—	7	7	8	—	—
Barber shops	—	—	—	5	6	6	5	6
Funeral service and crematories	—	—	—	—	6	—	6	5
Miscellaneous personal services	5	5	6	—	—	7	11	5
Business services	210	192	255	212	168	183	196	161
Advertising	6	13	18	16	7	8	9	9
Mailing, reproduction, stenographic	8	—	9	12	5	14	5	—
Services to buildings	34	32	33	30	21	27	30	30
Disinfecting and pest control services	—	5	6	—	—	5	5	—
Building maintenance services, n.e.c.	23	23	27	27	17	22	25	26
Miscellaneous equipment rental and leasing	15	8	14	22	15	20	19	13
Heavy construction equipment rental	6	—	—	12	5	11	11	—
Personnel supply services	36	45	35	34	24	19	35	23
Employment agencies	7	5	7	—	—	—	—	5
Help supply services	27	39	28	30	19	17	32	17
Computer and data processing services	14	7	16	6	9	9	11	7
Miscellaneous business services	94	84	130	92	87	83	87	72
Detective and armored car services	42	51	73	49	47	36	36	39
Security systems services	—	—	5	7	—	7	—	—
Automotive repair, services, and parking	80	120	91	117	104	110	133	132
Automotive rentals, no drivers	11	8	14	6	9	—	16	11
Automobile parking	—	—	—	6	—	—	—	6
Automotive repair shops	53	85	62	80	68	69	80	82
Top, body, and upholstery repair shops and paint shops	—	12	23	19	19	17	12	20
Tire retreading and repair shops	5	—	—	5	—	—	6	8
Automotive transmission repair shops	—	5	—	—	—	—	—	—
General automotive repair shops	24	42	27	44	39	35	48	39
Automotive repair shops, n.e.c.	—	6	—	—	—	—	8	6
Automotive services, except repair	15	25	15	25	24	32	34	32
Automotive services, n.e.c.	11	18	10	19	21	25	28	22
Miscellaneous repair services	46	49	38	51	52	37	41	53
Electrical repair shops	10	11	9	15	13	5	13	14
Miscellaneous repair shops	33	35	29	34	36	31	26	36
Motion pictures	16	23	13	5	20	14	7	6
Motion picture production and services	10	11	—	—	5	6	—	—
Video tape rental	5	10	7	—	9	6	—	—
Amusement and recreation services	64	78	82	61	71	80	76	83
Producers, orchestras, entertainers	8	—	8	8	—	6	—	7
Commercial sports	7	6	18	13	24	15	9	19
Racing, including track operations	5	—	17	9	21	13	9	16
Miscellaneous amusement, recreation services	47	71	55	38	43	59	61	55
Public golf courses	—	—	—	—	6	—	7	—
Coin-operated amusement devices	—	5	6	—	—	—	—	—
Membership sports and recreation clubs	—	18	7	7	—	5	15	10
Health services	73	69	87	62	95	70	65	71
Offices and clinics of medical doctors	15	6	11	9	9	6	13	7
Offices and clinics of dentists	5	7	6	—	—	—	—	—
Nursing and personal care facilities	9	10	11	9	15	6	5	8
Hospitals	20	27	28	20	34	21	24	30
General medical and surgical hospitals	17	15	22	15	25	18	22	25
Medical and dental laboratories	7	—	—	—	—	6	—	—
Home health care services	11	8	20	15	19	23	16	13
Health and allied services, n.e.c.	—	5	—	—	6	—	—	—
Legal services	12	14	11	13	15	16	18	16
Educational services	35	28	30	27	27	30	33	28
Elementary and secondary schools	6	7	5	—	5	—	7	—
Colleges and universities	12	7	12	10	5	9	—	9
Schools and educational services, n.e.c.	13	10	10	17	16	15	20	15

See footnotes at end of table.

Occupational Injuries and Illnesses and Work-related Fatalities

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Industry – continued								
Social services	15	29	33	30	39	21	27	27
Individual and family services	—	7	8	7	14	5	6	7
Job training and related services	—	9	10	5	5	—	—	—
Child day care services	—	—	—	7	—	—	6	6
Residential care	6	10	6	6	17	9	7	9
Social services, n.e.c.	—	—	5	5	—	5	5	—
Membership organizations	37	41	43	28	43	31	31	24
Business associations	—	7	—	—	—	—	—	—
Civic and social associations	—	6	8	8	7	—	7	5
Religious organizations	25	26	27	18	29	25	20	18
Engineering and management services	53	45	71	57	51	42	37	39
Engineering and architectural services	24	21	35	29	25	21	16	16
Engineering services	19	14	22	24	15	7	11	10
Architectural services	—	—	—	—	—	5	—	—
Surveying services	—	—	10	—	7	9	—	—
Accounting, auditing, and bookkeeping	5	6	9	—	7	5	6	5
Research and testing services	14	10	11	14	12	7	7	10
Management and public relations	10	8	16	12	7	9	8	7
Private households	14	14	13	9	15	7	11	—
Services, n.e.c.	—	5	7	—	—	6	—	8
Government⁶	720	688	673	780	605	622	598	562
Federal government (including resident armed forces)	256	189	211	301	184	162	162	147
Agriculture, forestry and fishing	—	—	5	—	—	—	—	—
Transportation and public utilities	20	17	11	18	15	14	25	17
U.S. Postal Service	14	14	11	16	14	14	17	17
Electric, gas, and sanitary services	—	—	—	—	—	—	6	—
Electric services	—	—	—	—	—	—	5	—
Services	8	5	8	5	—	—	—	5
Public administration	222	162	183	270	159	143	133	117
Executive, legislative, and general government	—	6	—	97	—	—	—	—
Justice, public order, and safety	—	7	12	—	9	—	7	—
Public order and safety	—	7	11	—	9	—	6	—
Police protection	—	7	7	—	5	—	5	—
Administration of human resources	—	—	—	—	—	—	—	7
Environmental quality and housing	8	—	27	8	7	20	14	5
Administration of economic programs	12	12	21	—	—	6	7	—
National security and international affairs	195	130	118	157	140	111	100	97
National security	194	130	117	156	139	109	97	96
State government	115	147	114	127	130	125	136	108
Construction	14	17	21	18	19	14	16	14
Heavy construction, except building	14	17	21	18	18	14	16	14
Highway and street construction	14	17	21	18	18	14	16	14
Transportation and public utilities	6	7	—	5	6	6	—	6
Services	24	31	22	25	29	26	27	22
Health services	6	7	—	—	—	—	5	—
Educational services	11	18	17	18	21	19	15	14
Elementary and secondary schools	—	6	—	—	—	—	—	—
Colleges and universities	7	11	14	15	18	16	12	10
Social services	—	—	—	—	—	—	—	5

See footnotes at end of table.

TABLE E-2. Fatal occupational injuries by selected worker and case characteristics, 1992-99 — Continued

Characteristics	Year							
	1992	1993	1994	1995	1996	1997	1998	1999
Industry – continued								
Public administration	70	91	65	78	70	77	90	66
Executive, legislative, and general government	—	11	—	—	—	—	10	—
Justice, public order, and safety	27	37	31	43	28	43	34	36
Public order and safety	27	36	30	43	28	42	34	35
Police protection	18	23	14	28	17	26	20	20
Correctional institutions	6	12	11	8	7	11	12	12
Finance, taxation, and monetary policy	—	—	—	—	—	—	8	—
Administration of human resources	—	10	—	7	12	5	9	6
Environmental quality and housing	11	10	5	9	5	—	13	12
Administration of economic programs	25	21	22	16	20	21	15	8
Local government	341	345	338	341	289	331	296	301
Construction	30	21	27	24	29	15	17	20
Heavy construction, except building	30	19	25	23	28	14	17	18
Highway and street construction	24	17	20	19	20	13	16	14
Heavy construction, except highway	6	—	5	—	8	—	—	—
Transportation and public utilities	34	47	41	41	22	35	36	33
Local and interurban passenger transportation	9	15	8	11	—	7	6	9
Local and suburban transportation	7	15	7	10	—	6	6	7
Electric, gas, and sanitary services	16	29	32	27	18	26	28	21
Electric services	—	8	—	—	—	—	—	6
Water supply	—	—	8	6	—	9	7	—
Sanitary services	11	12	17	11	9	8	13	10
Sewerage systems	5	5	7	—	—	5	—	5
Refuse systems	6	7	8	8	7	—	11	5
Services	53	62	34	44	45	54	42	48
Amusement and recreation services	7	7	5	—	—	—	—	—
Miscellaneous amusement, recreation services	7	7	5	—	—	—	—	—
Health services	—	7	—	8	9	6	—	9
Hospitals	—	—	—	7	—	—	—	6
General medical and surgical hospitals	—	—	—	7	—	—	—	6
Educational services	32	43	20	28	28	38	32	34
Elementary and secondary schools	28	35	19	26	26	34	27	32
Social services	6	—	5	5	—	6	—	—
Individual and family services	6	—	—	—	—	—	—	—
Public administration	216	211	231	229	185	221	199	196
Executive, legislative, and general government	61	60	42	40	41	32	34	31
Executive offices	13	13	9	—	—	—	—	—
Legislative bodies	7	—	—	—	6	—	6	—
Executive and legislative combined	31	30	21	15	28	10	10	7
Justice, public order, and safety	131	130	161	167	121	166	152	144
Public order and safety	129	130	160	165	119	166	150	144
Police protection	102	88	117	110	76	114	102	91
Correctional institutions	—	—	—	7	—	—	—	—
Fire protection	23	35	38	41	39	50	42	50
Administration of human resources	—	—	7	—	—	—	—	—
Environmental quality and housing	9	12	16	12	12	9	5	13
Administration of economic programs	8	5	5	8	10	11	7	—

¹ May include volunteers and other workers receiving compensation.

² Includes paid and unpaid family workers, and may include owners of incorporated businesses, or members of partnerships.

³ Persons identified as Hispanic may be of any race.

⁴ Includes fatalities that occurred in structures that do not meet the definition of permit required confined spaces as defined by Occupational Safety and Health Administration regulations.

⁵ Includes the category "Bodily reaction and exertion."

⁶ Includes fatalities to workers employed by governmental organizations regardless of industry.

NOTE: Totals for major categories may include subcategories not shown separately.

Dashes indicate no data reported or data that do not meet publication criteria.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries